

Glossary

1-in-10 Year Drought A drought of such intensity, that it is expected to have a return frequency of once in ten years (on average). A drought, in which below normal rainfall has a 90 percent probability of being exceeded over a 12-month period. This means that there is only a 10 percent chance that less than this amount of rain will fall in any given year.

1-in-10 Year Level of Certainty Probability that the needs for reasonable-beneficial uses of water will be fully met during a 1-in-10 year drought.

Acre-foot The volume of water that covers one acre to a depth of one foot; 43,560 cubic feet; 1,233.5 cubic meters; 325,851 gallons.

Algal Bloom Rapid growth of algae on the surface of lakes, streams or ponds; typically stimulated by nutrient enrichment.

Alternative Water Supply A supply of water that has been reclaimed after one or more public supply, municipal, industrial, commercial or agricultural uses, or a supply of stormwater, or brackish or salt water, that has been treated in accordance with applicable rules and standards sufficient to supply the intended use.

Aquifer A portion of a geologic formation or formations that yield water in sufficient quantities to be a supply source.

Aquifer Storage and Recovery (ASR) The injection of fresh water into a confined saline aquifer during times when supply exceeds demand (wet season), and recovering it during times when there is a supply deficit (dry season).

Aquifer System A heterogeneous body of intercalated permeable and less permeable material that acts as a water-yielding hydraulic unit of regional extent.

Average Rainfall Year A year having rainfall with a 50 percent probability of being exceeded over a 12-month period.

Backpumping The practice of actively pumping water leaving an area back into a surface water body.

Baseline Condition (see *Reference Condition*)

Basin (Groundwater) A spatial hydrological unit containing one large aquifer or several connecting and interconnecting aquifers.

Basin (Surface Water) A tract of land drained by a surface water body or its tributaries.

Bathymetry The measurement of water depth at various places in a body of water.

Benthos/Benthic The bottom of a lake or sea or the macroscopic organisms that live in the bottom substrate, such as clams and worms.

Biomass The amount of living matter, as in a unit per area or volume of habitat.

Biscayne Aquifer A portion of the Surficial Aquifer System, which provides most of the fresh water for public water supply and agriculture within Miami-Dade, Broward and southeastern Palm Beach County. It is highly susceptible to contamination due to its high permeability and proximity to land surface in many locations.

Central and Southern Florida Project Comprehensive Review Study (C&SF Restudy or Restudy) A five-year study effort that looked at modifying the current C&SF Project to restore the greater Everglades and south Florida ecosystem, while providing for the other water related needs of the region. The study concluded with the Comprehensive Plan being presented to the Congress on July 1, 1999. The recommendations made within the Restudy, that is, structural and operational modifications to the C&SF Project, are being further refined and will be implemented in the Comprehensive Everglades Restoration Plan (CERP).

Central and Southern Florida Flood Control Project (C&SF Project) A complete system of canals, storage areas and water control structures spanning the area from Orlando south to the Everglades to both the east and west coasts. It was designed and constructed during the 1950s by the United States Army Corps of Engineers (USACE) to provide flood control and improve navigation and recreation.

Clastic Rock or sediment composed of individual grains or fragments from physical breakdown of a larger mass, which have been transported from its place of origin.

Comprehensive Everglades Restoration Plan (CERP) The implementation of recommendations made within the Restudy, that is, structural and operational modifications to the C&SF Project are being further refined and will be implemented through this plan.

Conservation (see *Water Conservation*)

Consumptive Use A type of water use that reduces an amount of water in the source from which it is withdrawn.

Consumptive Use Permit (CUP) A permit issued by the SFWMD under authority of Chapter 40E-2, F.A.C., allowing withdrawal of water for consumptive use.

Control Structure A man-made structure designed to regulate the level/flow of water in a canal or water body (e.g., weirs, dams).

Demand The quantity of water needed to be withdrawn to fulfill a requirement.

Dissolved Oxygen The concentration of oxygen dissolved in water, sometimes expressed as percent saturation, where saturation is the maximum amount of oxygen that theoretically can be dissolved in water at a given altitude and temperature.

District Water Management Plan (DWMP) Regional water resource plan developed by the District under Ch. 373.036, F. S.

Domestic Self-Supplied (DSS) Water Demand (*Same as Residential Self-Supplied Water Demand*) The water used by households whose primary source of water is private wells and water treatment facilities with pumpages of less than 0.10 million gallons per day.

Drawdown The vertical distance a water level is lowered resulting from a withdrawal at a given point.

Ephemeral Surface water body that holds water only during and immediately after periods of rainfall.

Epiphytes Plants that grow on other plants and usually derive their moisture and nutrients from the air and rain.

Eutrophication The gradual increase in nutrients in a body of water. Natural eutrophication is a gradual process, but human activities may greatly accelerate the process.

Evapotranspiration (ET) The combined water losses from the surface of water and soils (evaporation) and plants (transpiration).

Everglades Agricultural Area (EAA) The area of histosols (organic soils) south of Lake Okeechobee, which is used for agricultural production.

Flatwoods (Pine) Natural communities that occur on level land and are characterized by a dominant overstory of slash pine. Depending on soil drainage characteristics and position in the landscape, pine flatwoods habitats can exhibit xeric to moderately wet conditions.

Florida Administrative Code (F.A.C.) The Florida Administrative Code is the official compilation of the administrative rules and regulations of state agencies.

Florida Department of Environmental Protection (FDEP) The SFWMD operates under the general supervisory authority of the FDEP, which includes budgetary oversight.

Florida Statutes (F.S.) The Florida Statutes are a permanent collection of state laws organized by subject area into a code made up of titles, chapters, parts and sections. The Florida Statutes are updated annually by laws that create, amend or repeal statutory material.

Floridan Aquifer System (FAS) A highly-used aquifer system composed of the Upper Floridan and Lower Floridan Aquifers. It is the principal source of water supply north of Lake Okeechobee and the upper Floridan Aquifer is used for drinking water supply in parts of Martin and St. Lucie counties. From Jupiter to south Miami, water from the Floridan Aquifer System is mineralized (total dissolved solids are greater than 1,000 mg/L) along coastal areas and in southern Florida.

Flow The actual amount of water flowing by a particular point over some specified time. In the context of water supply, flow represents the amount of water being treated, moved or reused. Flow is frequently expressed in millions of gallons per day (MGD) or cubic feet per second (cfs).

Food Web The totality of interacting predator-prey relationships (food chains) in an ecological community.

Geographic Information Systems (GIS) The abstract representation of landscape features (natural or cultural) into a digital database, geographic information system.

Governing Board Governing Board of the South Florida Water Management District.

Groundwater Water beneath the soil surface, whether or not flowing through known and definite channels.

Harm The temporary loss of water resource functions, as defined for consumptive use permitting in Chapter 40E-2, F.A.C., which results from a change in surface or groundwater hydrology and takes a period of one to two years of average rainfall conditions to recover.

Hectare A unit of measure in the metric system equal to 10,000 square meters (2.47 acres).

Hydrological Alterations The deviation from a natural hydrological pattern; examples include the lack of adequate seasonal water level fluctuations and an unnatural reversal of seasonal high and low water levels.

Hydropattern The seasonal pattern of inundation or saturation of an ecosystem, which can include aspects such as timing, duration and severity of flooding or drying.

Hydroperiod The frequency and duration of inundation or saturation of an ecosystem. In the context of characterizing wetlands, the term hydroperiod describes that length of time during the year that the substrate is either saturated or covered with water.

Intermediate Aquifer System (IAS) This aquifer system consists of five zones of alternating confining and producing units. The producing zones include the Sandstone and mid-Hawthorn Aquifers.

Irrigation The application of water to crops and other plants by artificial means.

Karst A topography formed over limestone, dolomite or gypsum and characterized by sinkholes, caves and underground drainage.

Lake Okeechobee Florida's largest lake, which measures 730 square miles and is the second largest freshwater lake wholly within the United States.

Level of Certainty Probability that the demands for reasonable-beneficial uses of water will be fully met for a specified period of time (generally taken to be one year) and for a specified condition of water availability (generally taken to be a drought event of a specified return frequency).

Littoral Of, relating to, situated or growing on or near a shore.

Load A measure of the amount of dissolved material entering a water body; calculated by multiplying the concentration of dissolved material by flow.

Marsh A frequently or continually inundated non-forested wetland characterized by emergent herbaceous vegetation adapted to saturated soil conditions.

Minimum Flow and Level (MFL) The point at which further withdrawals would cause *significant harm* to the water resources/ecology of the area.

National Geodetic Vertical Datum (NGVD) A nationally established reference for elevation data.

Natural Resources Conservation Service (NRCS) An agency of the U.S. Department of Agriculture (USDA) that provides technical assistance for soil and water conservation, natural resource surveys and community resource protection. Formerly the U.S. Soil Conservation Service (SCS).

Nuisance (Invasive) Species Native or non-native (typically plant) species that spreads rapidly under disturbed conditions and displaces more desirable plant communities.

Organics Involving organic or products of organic life; relating to or composed of chemical compounds containing hydrocarbon groups.

Pelagic Zone Open water zone.

Permeability Defines the ability of a substrate to transmit fluid.

Planktonic The free-floating or weakly swimming minute animal and plant life of a body of water.

Potable Water Water that is safe for human consumption. The maximum chloride concentration is 250 milligrams/liter.

Potentiometric Head The level to which water will rise when a well is pierced in a confined aquifer.

Potentiometric Surface An imaginary surface representing the total head of groundwater.

Public Water Supply (PWS) Utilities that provide potable water for public use.

Reasonable-Beneficial Use Water use in such quantity as is necessary for economic and efficient utilization for a purpose and in a manner that is both reasonable and consistent with the public interest.

Reference Condition. A representation of some defined condition in the watershed that is used for the purpose of comparison.

Regional Water Supply Plan (RWSP) Detailed water supply plan developed by the District under Section 373.0361, F.S., providing an evaluation of available water supply and projected demands at the regional scale. The planning process projects future demand for 20 years and develops strategies to meet identified needs.

Reservations of Water (see *Water Reservations*).

Reservoir A man-made or natural water body used for water storage.

Residential Self-Supplied Water Demand (*Same as Domestic Self-Supplied Water Demand*) The water used by households whose primary source of water is private wells and water treatment facilities with pumpages of less than 0.5 million gallons per day.

Restudy (see *Central and Southern Florida Project Comprehensive Review Study*).

Saline Water or Saltwater Intrusion This occurs when more dense saline water moves laterally inland from the seacoast, or moves vertically upward, to replace fresh water in an aquifer.

Seawater Water which has a chloride concentration equal to or greater than 19,000 milligrams per liter.

Secchi Disk A black and white disk used to measure the transparency or clarity of water by lowering the disk into the water horizontally and noting the greatest depth at which differences between colors can be distinguished.

Self-Supplied The water used to satisfy a water need that is not supplied by a public water supply utility.

Serious Harm The long-term loss of water resource functions, as addressed in Chapters 40E-21 and 40E-22, F.A.C., resulting from a change in surface or groundwater hydrology.

Significant Harm The temporary loss of water resource functions, which result from a change in surface or groundwater hydrology, that takes more than two years to recover, but which is considered less severe than serious harm. The specific water resource functions addressed by a MFL and the duration of the recovery period associated with significant harm are defined for each priority water body based on the MFL technical support document.

Slough A channel in which water moves sluggishly, or a place of deep muck, mud or mire. Sloughs are wetland habitats that serve as channels for water draining off surrounding uplands and/or wetlands.

Spodic A soil horizon characteristic of flatwood soils.

Stage The water surface elevation of a water body.

Storm Water Surface water resulting from rainfall runoff that does not percolate into the ground or evaporate.

Surface Water Water that flows, falls or collects above the soil or substrate surface.

Surficial Aquifer System (SAS) Often the principal source of water for urban uses within certain areas of south Florida. This aquifer is unconfined, consisting of varying amounts of limestone and sediments that extend from the land surface to the top of an intermediate confining unit.

Swamp A seasonally, frequently or continuously inundated forested wetland.

Truck Farming The horticultural practice of growing one or more vegetable crops on a large scale for shipment to distant markets.

Turbidity The measure of suspended material in a liquid.

Tussock A compact hummock of generally solid ground in a bog or marsh, usually covered with and bound together by the roots of low vegetation, such as grasses or sedges.

Uplands An area with a hydrological regime that is not sufficiently wet to support vegetation typically adapted to life in saturated soil conditions and does not have a hydric soil.

Valued Ecosystem Component (VEC) A resource-based management strategy similar to a program developed by the EPA as part of the National Estuary Program. For the purposes of this study, the VEC approach is based on the concept that management goals for a specific water body can best be achieved by providing suitable environmental conditions that will support certain key species, or key groups of species, that inhabit the system.

Water Budget An accounting of total water entering, residing in and leaving a given location or activity.

Water Conservation Reducing the demand for water through activities that alter water use practices, e.g., improving efficiency in water use, and reducing losses of water, waste of water and water use.

Water Reservations State law on water reservations, in Section 373.223(4), F.S., defines water reservations as follows: “The governing board or the department, by regulation, may reserve from use by permit applicants, water in such locations and quantities, and for such seasons of the year, as in its judgment may be required for the protection of fish and wildlife or the public health and safety. Such reservations shall be subject to periodic review and revision in the light of changed conditions. However, all presently existing legal uses of water shall be protected so long as such use is not contrary to the public interest.”

Water Resource Development The formulation and implementation of regional water resource management strategies, including the collection and evaluation of surface water and groundwater data; structural and nonstructural programs to protect and manage the water resources; the development of regional water resource implementation programs; the construction, operation and maintenance of major public works facilities to provide for flood control, surface and underground water storage and groundwater recharge augmentation; and related technical assistance to local governments and to government-owned and privately-owned water utilities.

Watershed The drainage area from which all surface water drains to a common receiving water body system.

Water Shortage Declaration If there is a possibility that insufficient water will be available within a source class to meet the estimated present and anticipated user demands from that source, or to protect the water resource from serious harm, the governing board may declare a water shortage for the affected source class. (Rule 40E-21.231, F.A.C.) Estimates of the percent reduction in demand required to match available supply is required and identifies which phase of drought restriction is implemented. A gradual progression in severity of restriction is implemented through increasing phases.

Once declared, the District is required to notify permitted users by mail of the restrictions and to publish restrictions in area newspapers.

Water Supply Development The planning, design, construction, operation and maintenance of public or private facilities for water collection, production, treatment, transmission or distribution for sale, resale or end use.

Water Year The 12-month period, May 1 through April 30. The water year is designated by the calendar year in which it ends. Therefore, the 2004 water year ends on April 30, 2004

Wetlands Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands typically have hydric soils.

Xeric Of or pertaining to a habitat having a low or inadequate supply of moisture, or of or pertaining to an organism living in such an environment.

